Access DB# ________

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Deborah Lambkin Examiner #: 71300 Date: 2/6/03
Art Unit: 1626 Phone Number 30 8-4522 Serial Number: 09/886,044
Mail Box and Bldg/Room Location: CM1 3E03 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

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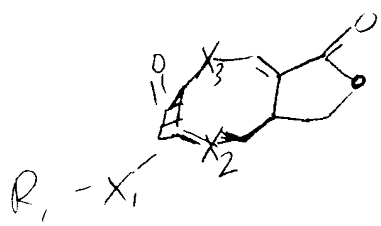
Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Cyclipostins

Inventors (please provide full names): Laszlo Vertesy et al

Earliest Priority Filing Date: ________

***For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.**

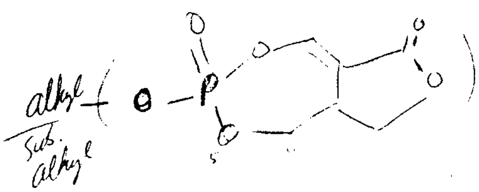


R_1 = alkyl

X_1 =, X_2, X_3 } O, S, N, C

E = P, S

eg)



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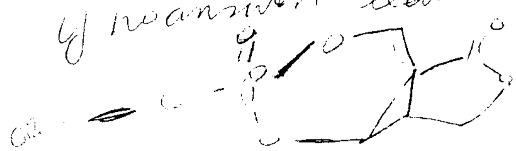

Thanks
Deb

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STAFF USE ONLY	Type of Search		Vendors and cost where applicable
Searcher: Sheppard	NA Sequence (#)		STN
Searcher Phone #: 308-4499	AA Sequence (#)		Dialog
Searcher Location:	Structure (#)		Questel/Orbit
Date Searcher Picked Up:	Bibliographic		Dr.Link
Date Completed: 2/6/03	Litigation		Lexis/Nexis
Searcher Prep & Review Time:	Fulltext		Sequence Systems
Clerical Prep Time:	Patent Family		WWW/Internet
Online Time:	Other		Other (specify)

PTO-1590 (8-01)

=> fil hcaplus
FILE 'HCAPLUS' ENTERED AT [illegible]
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FILE COVERS 1907 - 6 Feb 2003 VOL 138 ISS 6
FILE LAST UPDATED: 5 Feb 2003 (20030205/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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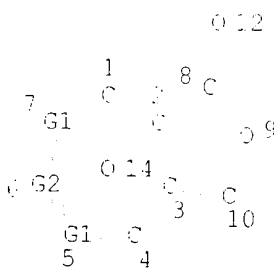
L4 STR



VAR G1=O/N/S/C
VAR G2=P/S
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 15

STEREO ATTRIBUTES: NONE
L5 32 SEA FILE=REGISTRY SSS FUL L4
L6 26 SEA FILE=HCAPLUS ABB=ON PLU=ON L5

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L6 ANSWER 1 OF 26 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:410371 HCAPLUS
DOCUMENT NUMBER: 137:165939

TITLE: Cyclipostins, novel hormone-sensitive lipase inhibitors from Streptomyces sp. DSM 13381: II. Isolation, structure elucidation and biological properties

AUTHOR(S): Vertesy, Laszlo; Beck, Peter; Brenstrup, Mark; Ehrlich, Klaus; Kurz, Michael; Maller, Gunter; Schummer, Dietmar; Seibert, Gerhard

CORPORATE SOURCE: LG Natural Products Research, Germany

SOURCE: Journal of Antibiotics (2000), 53(5), 480-494
CODEN: JANTAJ; ISSN: 0021-8820

PUBLISHER: Japan Antibiotics Research Association

DOCUMENT TYPE: Journal

LANGUAGE: English.

GI

I R=R3=Me, R1=CH, R2=H
II R=R3=Me, R1=R2=H
III R=R1=H, R2=R3=Me
IV R=Me, R1=R2=H, R3=Et

AB Hormone-sensitive lipase (HSL) is a key enzyme of lipid metab. and its control is therefore a target in the treatment of diabetes mellitus. Cultures of the Streptomyces species DSM 13381 have been shown to potently inhibit HSL. Ten inhibitors of HSL, termed cyclipostins, have been isolated from the mycelium of this microorganism and a further nine related compds. detected. Their structures were characterized by 2-D NMR expts. and by mass spectrometry and were found to comprise neutral cyclic enol phosphate esters with an addnl. .gamma.-lactone ring. On account of their ester-bound fatty alc. side chain, the cyclipostins have physicochem. properties similar to those of triglycerides. The outstanding characteristic of the cyclipostins is their strong anti-HSL activity, with IC50 values in the nanomolar range. The in vitro and in vivo activities of cyclipostins A, P, P2, and S (I.fwdarw.IV) for inhibition are reported.

IT **372083-50-6P**, Cyclipostin A **372091-46-8P**, Cyclipostin P
372091-94-6P, Cyclipostin P2 **372092-03-0P**, Cyclipostin S
RL: PAC (Pharmacological activity); PEP (Properties); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(isolation, structure elucidation, and biol. properties of the hormone-sensitive lipase inhibitors cyclipostins from Streptomyces DSM 13381)

IT **372090-27-2P**, Cyclipostin F **372090-93-2P**, Cyclipostin N
372091-96-8P, Cyclipostin R **372091-98-0P**, Cyclipostin R2
372092-04-1P, Cyclipostin T **372092-05-2P**, Cyclipostin T2
RL: PEP (Properties); PUR (Purification or recovery); PREP (Preparation)
(isolation, structure elucidation, and biol. properties of the hormone-sensitive lipase inhibitors cyclipostins from Streptomyces DSM 13381)

IT **372088-34-1P**, Cyclipostin A2 **372091-95-7P**, Cyclipostin Q
372092-36-9P, Cyclipostin B **372092-41-6P**, Cyclipostin C

372092-43-8P, [illegible] **372092-44-9P**, [illegible]
372092-46-1P, [illegible] **372092-51-8P**, [illegible]
447408-07-3P, [illegible]
RL: BSU (Biol[illegible] study, [illegible]); [illegible]
(Purification or recovery); BIOL (Biological study); PREP (Preparation)
(of Streptomyces DSM [illegible])

REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF [illegible]
ACCESSION NUMBER: [illegible]
DOCUMENT NUMBER: [illegible]
TITLE: [illegible], process [illegible] their preparation, and pharmaceutical use thereof
INVENTOR(S): Vertesy, Laszlo; [illegible], Klaus; Kurz, [illegible]; [illegible], Joachim
PATENT ASSIGNEE(S): Germany
SOURCE: U.S. Pat. Appl. Publ., [illegible] pp., Cont.-in-part of U. S. Ser. No. 847,[illegible].
CODEN: [illegible]
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: [illegible]
PATENT INFORMATION:

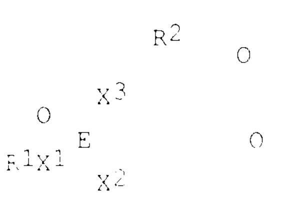
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002[illegible]8645	A1	[illegible]	US 2001-[illegible]6044	20010622
DE 10021[illegible]31	A1	[illegible]1115	DE 2000-10021731	20000504
WO 2001[illegible]3497	A1	20011108	WO 2001-EP4652	20010425

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, [illegible], [illegible], [illegible], [illegible], [illegible], HR, HU, ID, IL, IN, IS, JP, KE, KG, [illegible], [illegible], [illegible], [illegible], [illegible], [illegible], [illegible], LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, [illegible], [illegible], [illegible], [illegible], [illegible], [illegible], RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, [illegible], [illegible], [illegible], [illegible], [illegible], [illegible], YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, [illegible], TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:

DE 2000-10021731	A	20000504
WO 2001-EP4652	W	20010425
US 2001-847277	A2	20010503

OTHER SOURCE(S): MARPAT [illegible]
GI



I

AB The invention provides compds. I [R1 = (un)branched (un)satd. (un)substituted carbo- or heterocyclic C2-30 chain, (un)substituted (aryl(CH2)n)m (m, n = 0-3); R2 = (un)substituted C1-6 alkyl, (un)substituted C2-6 alkenyl, (un)substituted C2-6 alkynyl; E = P, S; X1-X3 = O, NH, N, S, etc.], obtained by culturing Streptomyces species HAG 004107 (DSM 13381), and their physiol. tolerable salts and chem. equiv.

The invention furthermore provides a process for the prepn. of the cyclipostins, the microorganism HAG 004107 (DSM [illegible]), the use of the cyclipostins and their physiol. tolerable salts and solvates, esp. as pharmaceuticals, in particular as inhibitors of lipases and esterases, for treating diabetes, and pharmaceutical preps. which contain cyclipostin or a physiol. tolerable salt or equiv. thereof.

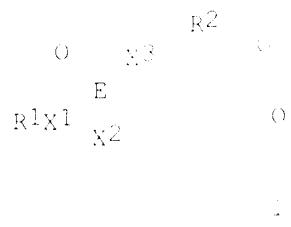
IT **372083-50-6P**, Cyclipostin A **372088-34-1P**, Cyclipostin A2
372090-27-2P, Cyclipostin F **372090-93-2P**, Cyclipostin N
372091-46-8P, Cyclipostin P **372091-94-6P**, Cyclipostin P2
372091-95-7P, Cyclipostin Q **372091-96-8P**, Cyclipostin R
372091-98-0P, Cyclipostin R2 **372092-03-0P**, Cyclipostin S
372092-04-1P, Cyclipostin T **372092-05-2P**, Cyclipostin T2
372092-36-9P, Cyclipostin P **372092-41-6P**, Cyclipostin P
RL: BEN (Biosynthetic preparation); NPO (Natural product occurrence); PAC (Pharmacological activity); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)
(cyclipostins, fermentative prodn., and pharmaceutical use)

L6 ANSWER 3 OF 36 HCAPLUS COPYRIGHT 2005 ACS
ACCESSION NUMBER: 2001:816678 HCAPLUS
DOCUMENT NUMBER: 135:356841
TITLE: Method for the production of cyclipostins microbially by the cultivation of the Streptomyces species HAG 004107 (DSM 13381) and their use as inhibitors of lipases
INVENTOR(S): Vertesy, Laszlo; Ehrlich, Klaus; Kurz, Michael; Wink, Joachim
PATENT ASSIGNEE(S): Aventis Pharma Deutschland G.m.b.H., Germany
SOURCE: PCT Int. Appl., 56 pp.
CODEN: PIXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001083497	A1	20011108	WO 2001-EP4452	20010425
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
DE 10021731	A1	20011115	DE 2000-10021731	20000504
EP 1280812	A1	20030205	EP 2001-936175	20010425
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
US 2002058645	A1	20020516	US 2001-886044	20010622

PRIORITY APPLN. INFO.: DE 2000-10021731 A 20000504
WO 2001-EP4452 W 20010425
US 2001-886044 A2 20010622

OTHER SOURCE(S): MARPAT 135:356841
GI



AB The invention relates to compds. I [G = [illegible], [illegible], (un)substituted C2-30-alkyl, cycloalkyl, heterocyclyl; R1 = H-C6-alkyl, C2-6-alkenyl, C2-6-alkynyl; E = P, S; X1, X2, X3 = O, NH, N:, S, CH2, CHR2], obtained by the cultivation of the Streptomyces species RAG 004107 (DSM 13981) and to all their stereoisomers and mixts., physiol. compatible salts and chem. equiv. The invention also relates to a method for producing the cyclipostins and their physiol. compatible salts and chem. equiv. as medicaments, in particular as inhibitors of lipases [IC50 = 20 nM (cyclipostin A; I; [illegible]), R1 = Me, E = P, X1 = X2 = O, 20 nM (cyclipostin B; I; [illegible]), R1 = Et, X1 = X3 = S, 40 nM (cyclipostin L; I; R1 = [illegible], R2 = Me, E = P, X1 = X2 = O, inactive against lipase].

IT **372083-50-6P**, Cyclipostin A **372092-36-9P**, Cyclipostin B
372092-41-6P, Cyclipostin C
RL: PAC (Biological activity or effector, except adverse); BCC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(isolation of cyclipostins obtained by the cultivation of the Streptomyces species RAG 004107 for use as inhibitors of lipases)

IT **372088-34-1P**, Cyclipostin A2 **372090-27-2P**, Cyclipostin P
372090-93-2P, Cyclipostin N **372091-46-8P**, Cyclipostin P
372091-94-6P, Cyclipostin P2 **372091-95-7P**, Cyclipostin Q
372091-96-8P, Cyclipostin R **372091-98-0P**, Cyclipostin R2
372092-03-0P, Cyclipostin S **372092-04-1P**, Cyclipostin T
372092-05-2P, Cyclipostin T2 **372092-43-8P**, Cyclipostin D
372092-44-9P, Cyclipostin E
RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)
(isolation of cyclipostins obtained by the cultivation of the Streptomyces species RAG 004107 for use as inhibitors of lipases)

IT **372092-46-1**, Cyclipostin G **372092-51-8**, Cyclipostin H
RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(isolation of cyclipostins obtained by the cultivation of the Streptomyces species RAG 004107 for use as inhibitors of lipases)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 4 OF 26 HCAPLUS COPYRIGHT 2013 ACS
ACCESSION NUMBER: 1999:133711 HCAPLUS
DOCUMENT NUMBER: 130:337674
TITLE: Pyrolysis of tricyclic cyclobutane-fused sulfolanes as a route to cis-1,2-divinyl compounds and their Cope-derived products
AUTHOR(S): Aitken, R. Alan; Cadogan, J. I. G.; Gosney, Ian; HumphriesBuchan, Caroline M.; McLaughlin, Lee M.;

Wyse, Stuart J.
CORPORATE SOURCE: Department of Chemistry, The University of [illegible], Edinburgh, EH9 3JJ, UK

SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1999), [illegible], 605-614
CODEN: JCPRB4; ISSN: [illegible]
PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 1[illegible]

AB Functionalization of the double bond of 3-thiabicyclo[3.2.0]hept-6-ene, readily formed by hydrolysis of the [2+2] cycloaddition of 3-sulfolene and maleic anhydride [illegible] hexahydrothieno[3',4':3,4]cyclobuta[1,2-c]furan-1,3-dione 5,5-dioxide) [illegible] oxidative bis-[illegible] tricyclic sulfones with the bicyclo[3.3.0.0[illegible]] skeleton. Flash vacuum pyrolysis 3-thiabicyclo[3.2.0]hept-6-ene 3,3-dioxide results in stereospecific extrusion of SO2 to give Z-hexa-1,3,5-triene which undergoes electrocyclization to give 1,3-cyclohexadiene while reaction of 3-thiabicyclo[3.2.0]hept-6-ene 3,3-dioxide with LiAlH4 results in non-stereospecific extrusion to give Z- and E-hexa-1,3,5-triene. Upon flash vacuum pyrolysis tricyclic sulfones lose SO2 to give [illegible]-membered ring products by Cope rearrangement of the initially formed cis-1,2-divinyl intermediates. The 1,3-dipolar cycloaddn. of nitrile oxides and [illegible] to the double bond of 3-thiabicyclo[3.2.0]hept-6-ene 3,3-dioxide gives tricyclic sulfones with the tricyclo[5.3.0.02,6]skeleton and a wider variety of these can be prepd. by conventional reactions of hexahydrothieno[3',4':3,4]cyclobuta[1,2-c]furan-1,3-dione 5,5-dioxide. Upon flash vacuum pyrolysis these lose SO2 to give stable cis-1,2-divinyl compds. The Diels-Alder adducts were prepd. from 3-thiabicyclo[3.2.0]hept-6-ene 3,3-dioxide and these behave differently upon flash vacuum pyrolysis, losing SO2 and [illegible] to give tetrasubstituted benzenes, in the latter case by way of an unexpected tetracyclic intermediate.

IT **224576-83-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of cis-divinyl compds. and their Cope-derived products via pyrolysis of tricyclic cyclobutane-fused sulfolanes)

IT **33974-24-2**
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of cis-divinyl compds. and their Cope-derived products via pyrolysis of tricyclic cyclobutane-fused sulfolanes)

IT **224576-81-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of cis-divinyl compds. and their Cope-derived products via pyrolysis of tricyclic cyclobutane-fused sulfolanes)

REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 5 OF 26 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1996:[illegible] HCAPLUS
DOCUMENT NUMBER: 125:[illegible]
TITLE: [illegible]sugacins A and B, novel and selective acetylcholinesterase inhibitors from Penicillium sp. FO-4259. I. Screening, taxonomy, fermentation, isolation and biological activity

AUTHOR(S): Kuno, Fumiyoshi; Otoguro, Kazuhiko; Shiomi, Kazuro; Iwai, Yuzuru; Omura, Satoshi
CORPORATE SOURCE: Research Center Biological Function, The Kitasato Institute, Tokyo, 108, Japan

SOURCE: Journal of Antibiotics (1996), 49(8), [illegible]
CODEN: JANTAJ; ISSN: 0021-8820

PUBLISHER: [illegible]
DOCUMENT TYPE: [illegible]
LANGUAGE: [illegible]

AB An in vitro screening method for selective acetylcholinesterase (AChE) inhibitors was established. Inhibitory activity of AChE and butyrylcholinesterase (BuChE) was measured and the culture broths of microorganisms that showed selective inhibition against AChE were characterized. By using this method, a strain producing the novel and selective inhibitors of AChE, [illegible] A and B, was picked out among over seven thousand microorganisms tested. [illegible] white powder from the [illegible], territrems B and C and cyclophostin that [illegible] against AChE. [illegible] and territrems are members of the [illegible] compds. They showed potent inhibitory activities against AChE with IC50 values in range of 1.0.approx.[illegible].8 nM. Furthermore, they showed greater than 2000-fold more potent inhibition against AChE than BuChE.

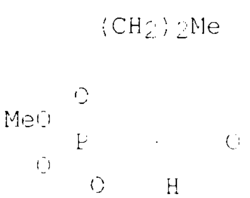
IT **144773-26-2P**, Cyclophostin
RL: BAC (Biological activity or effector, except adverse); BIN (Biosynthetic preparation); BSU (Biological study, unclassified); BIOL (Biological study); PREP (Preparation)
(screening method for acetylcholinesterase inhibitors)

L6 ANSWER 6 OF [illegible] [illegible]
ACCESSION NUMBER: [illegible]
DOCUMENT NUMBER: [illegible]
TITLE: Antibiotic NK901093A, its manufacture with Streptomyces, and insecticides and acaricides containing NK901093A
INVENTOR(S): Izawa, Takeo; Hayaoka, Tatsumi; Kobayashi, Masuko; Masui, Akio; Kurokawa, Takashi; Nakagawa, Taizo
PATENT ASSIGNEE(S): Nippon Kayaku KK, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06056859	A2	19940301	JP 1991-207234	19910725

PRIORITY APPLN. INFO.: JP 1991-207234 19910725

GI



I

AB Antibiotic NK901093A (I), useful as an insecticide and acaricide, is manufd. by culturing I-producing Streptomyces sp. S. lavendulae NK901093 (FERM P-11713) was shake-cultured in a medium contg. glycerin, soybean powder, and NaCl at 27.degree. for 2 days, aerobically cultured in the same medium for 1 day, aerobically cultured in a similar medium at 27.degree. for 65 h, filtered, and the filtrate (90 L) was processed to manuf. 36 mg I. I inhibited acetylcholinesterase from houseflies with 50% inhibitory concn. of [illegible] .times. 10-[illegible]M. Formulation examples and

physicochem. properties of I and properties of the [illegible] are also given.

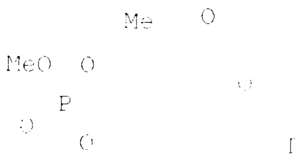
IT **156312-04-8**, NK 901093A
RL: BIOL (Biological study)
(acetylcholinesterase-inhibiting insecticide and acaricide, from Streptomyces lavendulae)

L6 ANSWER 7 OF 26 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: [illegible] HCAPLUS
DOCUMENT NUMBER: [illegible]
TITLE: [illegible], acetylcholinesterase inhibitor from Streptomyces lavendulae
AUTHOR(S): [illegible]; [illegible]; Hayaoka, Tatsumi; Nakagawa, Taizo; Izawa, Takeo; Kobayashi, Masuko; Harada, Nobuyuki
CORPORATE SOURCE: Appl. Microbiol. Res. Cent., Nippon Kayaku Co. Ltd., Ageo, 362, Japan
SOURCE: Journal of Antibiotics (1993), 46(8), 1315-18
CODEN: JANTAJ; ISSN: [illegible]
DOCUMENT TYPE: Journal
LANGUAGE: English
AB In the course of screening program for natural insecticides of microbial origin, the authors isolated a new product, cyclophostin (I), from Streptomyces lavendulae strain NK901093 as a strong inhibitor of acetylcholinesterase. I showed one of the strongest inhibitory activity values for the acetylcholinesterase of houseflies: I50 7.6 .times. 10-10M. The authors report here the isolation and structure of compd. I including its abs. stereochem. I is probably the same as TAN-1139, a compd. disclosed in the Japanese patient literature but whose structure has not been previously described.
IT **144773-26-2**, Cyclophostin
RL: BIOL (Biological study)
(acetylcholin esterase inhibitor, from Streptomyces lavendulae, isolation and structure of)

L6 ANSWER 8 OF 26 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1993:24772 HCAPLUS
DOCUMENT NUMBER: 118:24772
TITLE: Fermentative preparation of antibiotic NK901093 as insecticide and miticide.
INVENTOR(S): Kurokawa, Takashi; Hayaoka, Tatsumi; Izawa, Takeo; Kobayashi, Masuko; Kirihara, Shigeki; Nakagawa, Taizo
PATENT ASSIGNEE(S): Nippon Kayaku Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04145089	A2	19920519	JP 1990-268451	19901005

PRIORITY APPLN. INFO.: JP 1990-268451 19901005
GI

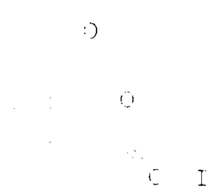


AB NK901093 (I) is prepd. with Streptomyces [illegible]. I showed IC50 of 2.5 .times. 10-[illegible] [illegible], [illegible] .times. 10-6M for malaoxon and killed [illegible] ppm.

IT **144773-26-2P**, NK 901093
FL: BMF (Bioindustrial manufacture); BIOL (Biological study); PREP (Preparation)
(manuf. of, with Streptomyces, as insecticide and miticide)

L6 ANSWER 9 OF 26 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: [illegible] HCAPLUS
DOCUMENT NUMBER: [illegible]
TITLE: [illegible]
AUTHOR(S): Cadogan, J. I. G.; Cameron, Donald K.; Gosney, Ian; Tinley, Edward J.; Wyse, Stuart J.; Amaro, Alicia
CORPORATE SOURCE: Dep. Chem., Univ. Edinburgh, Edinburgh, EH9 3JJ, UK
SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1991), (9), 2081-7
CODEN: JCPRB4; ISSN: 0300-922X
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 115:279722
GI

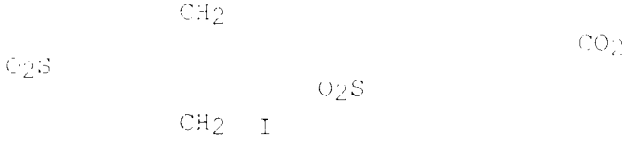


AB The effectiveness and limitations of 3-oxabicyclo[3.2.0]hept-6-ene-2,4-dione (I) (cyclobut-3-ene-1,2-dicarboxylic anhydride) as an acetylene equiv. in both 1,3-dipolar and Diels-Alder cycloaddns. is reported; it reacted readily with a variety of reagents, including N-benzylideneaniline N-oxide, nitrile oxides, diazomethane, cyclopentadiene, tetracyclone, anthracene, 1,2,5-triphenylphosphole 1-oxide and 1,3-diphenylisobenzofuran. In all cases, the sterically favored anti-isomers are formed exclusively. The configuration of the Diels-Alder adducts are assigned as endo with the exception of that from tetracyclone (and possibly 1,3-diphenylisobenzofuran) for which an exo-structure is assumed on the basis of steric arguments. Adducts were not obtained with several other reagents; possible reasons for this lack of reactivity are discussed. When subjected to flash vacuum pyrolysis, the adducts underwent thermal fragmentation, either by a retro-cleavage, or by loss of maleic anhydride to form products that are derived formally from reaction of acetylene in the cycloaddn. step. A concerted pathway is proposed for

the pyrolytic [illegible] than a stepwise radical mechanism.

IT **137411-69-9P**
PL: SPN (Synthetic preparation); PREP (Preparation)
(prepn., configuration and flash vacuum pyrolysis of)

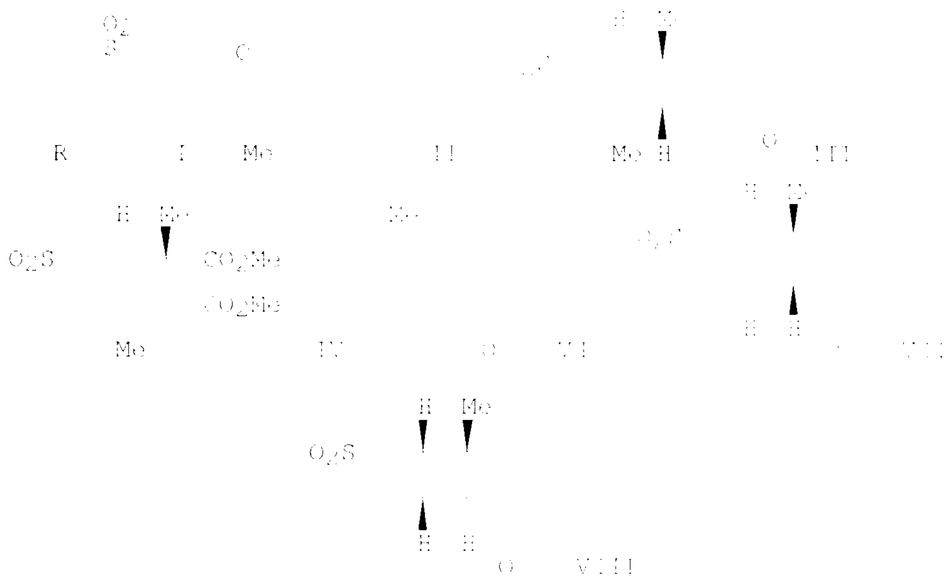
L6 ANSWER 10 OF 26 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: [illegible] HCAPLUS
DOCUMENT NUMBER: [illegible]
TITLE: [illegible]
AUTHOR(S): [illegible]
CORPORATE SOURCE: [illegible]
SOURCE: [illegible]
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT [illegible]
GI



AB Previous limitations of highly reactive [illegible] as a tandem annulating reagent in Diels-Alder reactions are overcome using its masked form I, and subsequent extrusion of SO2 by flash vacuum pyrolysis. E.g., Diels-Alder reaction of I with HC:CCH2OAc in PhMe gave the adduct II which was converted to Me 1,4,6,7-tetrahydronaphth-2-oate on flash vacuum pyrolysis at 500.degree..

IT **33974-24-2**
PL: RCT (Reactant); RACT (Reactant or reagent)
(esterification and reduction of)

L6 ANSWER 11 OF 26 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1986:69022 HCAPLUS
DOCUMENT NUMBER: 104:69122
TITLE: Synthesis of 1,5-dienes via [2 + 2] photocycloadditions between 2,5-dihydrothiophene 1,1-dioxides (sulfolenes) and .alpha.,.beta.-unsaturated cyclic ketones and anhydrides. Synthesis of 10-hydroxygeraniol
AUTHOR(S): Williams, John R.; Lin, Charles; Chodosh, Daniel F.
CORPORATE SOURCE: Dep. Chem., Temple Univ., Philadelphia, PA, USA
SOURCE: Journal of Organic Chemistry (1985), 50(26), 5815-22
CODEN: JOCEAH; ISSN: [illegible]
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 104:69022
GI



AR Photocycloaddn. [illegible] I (R = Me) [illegible] II [illegible] photoadduct III, esterification of which [illegible] IV. Flash vacuum pyrolysis of IV or its trans isomer, [illegible] by isomerization of IV with NaOMe, gave a mixt. of the 4 geometric isomers of MeO2CCMe:CHCH2CH2CMe:CHCO2Me (V) via Cope rearrangement of the 1,2-divinyl intermediate. Redn. of (E,E)-V gave (E,E)-HO(CH2CMe:CHCH2)2OH (10-hydroxygeraniol). Several other examples of this method are given, one of which involved photocycloaddn. of I (R = H) with cyclohexenone VI to give photoadducts VII and VIII, the structures of which were [illegible] by x-ray crystallog.

IT **82535-14-6P 99685-39-9P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn., esterification, and flash vacuum pyrolysis of)

L6 ANSWER 12 OF 26 HCAPLUS

ACCESSION NUMBER: 1983:612362 HCAPLUS

DOCUMENT NUMBER: 99:212362

TITLE: Dehydrogenative vacuum pyrolysis: a novel synthetic technique. Conversion of [illegible]octa-1,5-diene into styrene and related [illegible]

AUTHOR(S): Buchan, Caroline M.; [illegible]; [illegible], Ian; Hamill, Brendan J.; Newlands, Stephen F.; Whan, David A.

CORPORATE SOURCE: Dep. Chem., Univ. Edinburgh, Edinburgh, EH9 3JJ, UK

SOURCE: Journal of the Chemical Society, Chemical Communications (1983), (13), 725-6

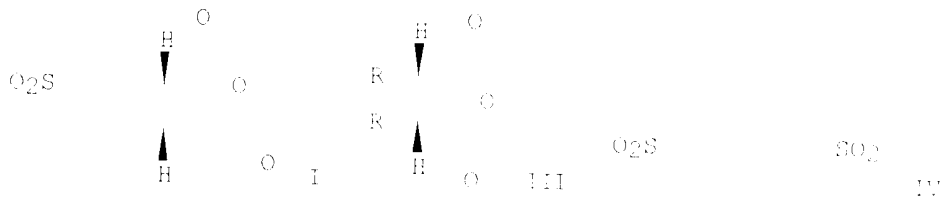
CODEN: JCCCAT; ISSN: 0022-4936

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 99:212362

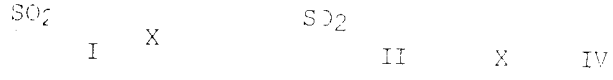
GI



AB Vacuum pyrolysis [illegible] 100.degree. gave phthalic anhydride. [illegible] III [R2 = (CH2CH:)2, R1 = H:H] gave [illegible] disulfone IV and 1,3-cyclooctadiene in the presence of [illegible] gave PhCH:CH2 in 12 and 62% yield, resp.

IT **33974-24-2**
RL: RCT (Reactant); RACT (Reactant or reagent)
(denydrogenative vacuum pyrolysis of, phthalic anhydride by)

L6 ANSWER 15 OF 26 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1983:71904 HCAPLUS
DOCUMENT NUMBER: 98:71904
TITLE: 3-Thiabicyclo[3.2.0]hept-6-ene 3,3-dioxide: a novel synthon for cis-1,2-divinyl intermediates and derived seven-membered ring systems
AUTHOR(S): Aitken, R. Alan; Cadogan, J. I. G.; Gosney, Ian; Hamill, Brendan J.; McLaughlin, Leo M.
CORPORATE SOURCE: Dep. Chem., Univ. Edinburgh, Edinburgh, EH9 3JJ, UK
SOURCE: Journal of the Chemical Society, Chemical Communications (1982), (20), 1164-5
CODEN: JCCCAT; ISSN: 0022-4936
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 98:71904
GI



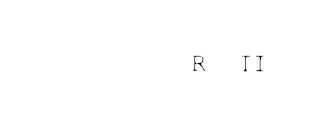
AB Functionalization of the double bond of the title compd. (I), followed by extrusion of SO2 gave cis-1,2-divinyl intermediates which underwent Cope rearrangement to give 7-membered rings. E.g., peroxidn. of I with HC(O)OOH for 48 h at 55.degree. gave II (X = O) (III) in 39% yield; pyrolysis of III at 580.degree. and 10-3 mm Hg gave IV (X = O) in 55% yield. Similarly, pyrolysis of II (X = NCO2Et), prepd. by photolysis of I in Et azidoformate, gave IV (X = NCO2Et).

IT **33974-24-2**
RL: RCT (Reactant); RACT (Reactant or reagent)
(oxidative decarboxylation of)

IT **84451-46-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and pyrolysis of)

L6 ANSWER 14 OF 26 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1982:471910 HCAPLUS
DOCUMENT NUMBER: 97:71910

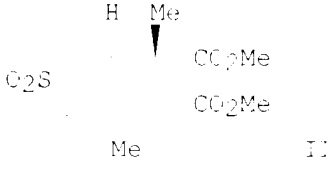
TITLE: [illegible]
AUTHOR(S): [illegible]
CORPORATE SOURCE: [illegible]
SOURCE: [illegible]
DOCUMENT TYPE: [illegible]
LANGUAGE: [illegible]
OTHER SOURCE(S): [illegible]
GI



AB The [illegible] were stereospecifically prepd. in [illegible] [R2 = (CO)2O] (III). [illegible] followed by esterification and [illegible] on pyrolysis at 550.degree. and 10-3 mm gave [illegible].

IT **82535-14-6**
RL: RCT (Reactant); RACT (Reactant or reagent)
(hydrolysis of)

L6 ANSWER 15 OF 26 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1982:20267 HCAPLUS
DOCUMENT NUMBER: 96:20267
TITLE: Photocycloaddition of 2,5-dihydrothiophene 3,3-dioxides to .alpha.,.beta.-unsaturated cyclic anhydrides. Synthesis of 10-hydroxygeraniol
AUTHOR(S): Williams, John R.; Lin, Charles
CORPORATE SOURCE: Dep. Chem., Temple Univ., Philadelphia, PA, 19122, USA
SOURCE: Journal of the Chemical Society, Chemical Communications (1981), (15), 752-3
CODEN: JCCCAT; ISSN: 0022-4936
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



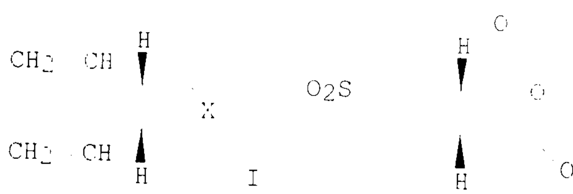
AB The photochem. cycloaddn. of 2,5-dihydro-3-methylthiophene 3,3-dioxide (I) with citraconic anhydride followed by CH2N2 addn. gave the diester II which on flash vacuum pyrolysis (500.degree., 0.5 mm) underwent SO2 elimination and Cope rearrangement to give (E,E-RCH:CMe(CH2)2CH:CMeR (III; R = CO2Me) (IV). Redn. of IV gave the title terpene precursor III (R = CH2OH) (V). The overall yield of V from I was 48 .

IT **79926-12-8P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn., esterification, and pyrolysis reactions of)

L6 ANSWER 16 OF 26 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1981:442793 HCAPLUS
DOCUMENT NUMBER: 95:42793
TITLE: Photochemical synthesis of some 3-[illegible]heptanes
AUTHOR(S): [illegible], V. Sh.; [illegible], K. [illegible]; [illegible], [illegible]
CORPORATE SOURCE: USSR
SOURCE: [illegible] (1980), (2), 150-6
From: Ref. Zh., Khim. 1981, Abstr. No. [illegible]
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB Title only translated.
IT **33974-24-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
IT **33974-22-0P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn., decarboxylation, bromination, [illegible], and [illegible])

L6 ANSWER 17 OF 26 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1981:156660 HCAPLUS
DOCUMENT NUMBER: 94:156660
TITLE: Flash vacuum pyrolysis of the 3-thiabicyclo[3.2.0]heptane 3,3-dioxide ring system: a new stereospecific synthesis of cis-1,2-divinyl derivatives
AUTHOR(S): Cadogan, J. I. G.; Gosney, Ian; McLaughlin, Leo M.; Hamill, Brendan J.
CORPORATE SOURCE: BP Res. Cent., Sunbury-on-Thames, TW16 7LN, UK
SOURCE: Journal of the Chemical Society, Chemical Communications (1980), (24), 1242-3
CODEN: JCCCAT; ISSN: 0022-4936
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I II

AB The cis-1,2-divinyl compds. I (X = O, S, NCH2Ph) were prepd. from the thiabicycloheptanedicarboxylic anhydride II. E.g., sequential esterification, redn., and cyclization of II gave 4-oxa-9-thiatricyclo[5.3.0.0]decane 9,9-dioxide, which on flash vacuum pyrolysis (10-3 mm Hg, 625.degree.) gave 62% I (X = O). The corresponding cis-1,2-divinyl anhydride and lactone derivs. were also prepd. from I by pyrolysis and sequential redn. (NaBH4, DMF) and pyrolysis, resp.
IT **77196-23-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and flash pyrolysis of, divinyl compd. by

IT **33974-24-2**
RL: RCT ([illegible] ; BAC [illegible]
(pyrolysis, [illegible], [illegible]
divinyl [illegible]

L6 ANSWER 18 OF 26 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1977:186542 HCAPLUS
DOCUMENT NUMBER: 86:186542
TITLE: Preparative photosynthesis of anhydrides and imides of polycyclic structures
AUTHOR(S): [illegible], V. M.; [illegible], I. A.; [illegible], L. S.; Lal'shevskii, P. V.
CORPORATE SOURCE: USSR
SOURCE: Khimiya i Fiz.-Khimiya Polimerov, [illegible]
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB Title only translated.
IT **33974-22-0P 33974-24-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

L6 ANSWER 19 OF 26 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1977:1096 HCAPLUS
DOCUMENT NUMBER: 86:1096
TITLE: Chemical regulation of plant growth using 3-thiabicyclo[3.2.0]heptane-6,7-dicarboxylic anhydride 3,3-dioxide
INVENTOR(S): Bloomfield, Jordan J.
PATENT ASSIGNEE(S): Monsanto Co., USA
SOURCE: U.S., 5 pp. Division of U.S. 3,873,568.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3979201	A	19760907	US 1974-524583	19741118
US 3873568	A	19750325	US 1972-275129	19720726

PRIORITY APPLN. INFO.: US 1972-275129 19720726
GI

AB 3-Thiabicyclo[3.2.0]heptane-6,7-dicarboxylic anhydride 3,3-dioxide (I; **33974-24-2**) regulates the natural growth or development of dicotyledonous plants. Thus, in small-plot expts., I applied to soybean plants at primary leaf stage (rate equiv. to .apprx.6 lb/acre) demonstrated effective retardation of vegetative growth. The synthesis of I is given.
IT **33974-24-2**
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)

(plant growth regulator)

L6 ANSWER 20 OF 26 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 197[illegible]:49[illegible] HCAPLUS
DOCUMENT NUMBER: 83:92371
TITLE: 3-Thiabicyclo(3.2.0)heptane-6,7-dicarboxylic anhydride 3,3-dioxide
INVENTOR(S): Bloomfield, Jordan J.
PATENT ASSIGNEE(S): Monsanto Co., USA
SOURCE: U.S., 1 pp.
CODEN: [illegible]
DOCUMENT TYPE: [illegible]
LANGUAGE: [illegible]
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3874768	A	19750325	US 1972-275129	19720726
US 3874801	A	19750401	US 1974-524843	19741118

PRIORITY APPLN. INFO.: US 1972-275129 19720726
GI For diagram(s), see printed CA Issue.
AB 3-Thiabicyclo(3.2.0)heptane-6,7-dicarboxylic anhydride 3,3-dioxide (**33974-24-2**) is a plant growth inhibitor. Thus, in greenhouse expts. at 4 lb. I/acre, applied to soybeans at the primary leaf stage, decreased the height of plants by approx. 25%, compared with untreated control plants. I was prepd. by reaction of maleic anhydride [108-31-6] with 2,5-dihydrothiophene 1,1-dioxide [77-79-2] in BzMe, at 5-6.degree., under uv light.
IT **33974-24-2**
RL: BIOL (Biological study)
(plant growth inhibitor

L6 ANSWER 21 OF 26 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1973:71898 HCAPLUS
DOCUMENT NUMBER: 78:71898
TITLE: 3-Sulfonobicyclo[3.2.0]heptane-6,7-dicarboxylic acid anhydrides or imides
INVENTOR(S): Shaikhrazieva, V. Sh.; Enikeev, R. S.; Tolstikov, G. A.
PATENT ASSIGNEE(S): Institute of Chemistry, Ufa
SOURCE: U.S.S.R. From: Otkrytiya, Izobret., Prom. Obraztsy, Tovarnye Znaki 1972, 49(22), 95.
CODEN: URXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Russian
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
SU 345157		19720714	SU	19700915

GI For diagram(s), see printed CA Issue.
AB The title compds. (I) are prepd. by treating 3-sulfolene with II (X = O, NH, or NR) in the presence of uv-radiation in acetone and a stream of inert gas.
IT **33974-24-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

L6 ANSWER 22 OF 26 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1972:153465 HCAPLUS
DOCUMENT NUMBER: 76:153465

TITLE: [illegible] maleic anhydride and its derivatives to 3-sulfolene
AUTHOR(S): Shaikhraz[illegible]eva, V. Sh.; Khikmatov, K. S.; Tolstikov, G. A.
CORPORATE SOURCE: Inst. Khim., Ufa, USSR
SOURCE: [illegible] CODEN: ZORKAE; ISSN: 0514-7492
DOCUMENT TYPE: Journal
LANGUAGE: Russian
GI For diagram(s), see printed CA Issue.
AB Maleic anhydride, maleimide, and dichloromaleic anhydride add to 3-sulfolene in Me2CO under uv irradn., forming the corresponding derivs. of 6,7-dicarboxy-3-thiabicyclo[3.2.0]heptane 3,3-dioxide (I), 6,7-dicarboximido-3-thiabicyclo[3.2.0]heptane 3,3-dioxide, and 6,7-dichloro-6,7-dicarboxy-3-thiabicyclo[3.2.0]heptane 3,3-dioxide, respectively. Photochem. dimerization of dimethylmaleic anhydride in Me2CO gave 95% cis,trans,cis-1,2,3,4-tetramethyl-cyclobutane-1,2,3,4-tetracarboxylic dianhydride (II). I and II gave the expected products with LiAlH4, aq. NaOH, PhNH2, MeOH, and N2H4.
IT **33974-22-0P 33974-24-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

L6 ANSWER 23 OF 26 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: [illegible] HCAPLUS
DOCUMENT NUMBER: [illegible]
TITLE: [illegible] maleic anhydride and its derivatives to 3-sulfolene
AUTHOR(S): Shaikhraz[illegible]eva, V. Sh.; Khikmatov, K. S.; Tolstikov, G. A.
CORPORATE SOURCE: Bashk. Fil., Inst. Khim., Ufa, USSR
SOURCE: Zhurnal Organicheskoi Khimii (1971), 7(8), 1763
CODEN: ZORKAE; ISSN: 0514-7492
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB Uv irradn. of maleic anhydride, maleimide, or dichloromaleic anhydride with 3-sulfolene in Me2CO afforded 3-sulfonobicyclo[3.2.0]heptane-6,7-dicarboxylic anhydride (I), the corresponding imide, and the 6,7-dichloro deriv. of I, resp., in 13-55% yield. Treatment of I with N2H4 gave the hydrazide, and redn. of I with LiAlH4 in THF yielded 6,7-bis(hydroxymethyl)-3-sulfonobicyclo[3.2.0]heptane.
IT **33974-22-0P 33974-24-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

L6 ANSWER 24 OF 26 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1968:3008 HCAPLUS
DOCUMENT NUMBER: 68:3008
TITLE: Constituents of Hyaenanche globosa. Structure of substance C and correlation between picrotoxinin and tutine
AUTHOR(S): Corbella, Attilio; Jommi, Giancarlo; Rindone, Bruno; Scolastico, Carlo
CORPORATE SOURCE: Univ. Milan, Milan, Italy
SOURCE: Annali di Chimica (Rome, Italy) (1967), 57(6), 758-69
CODEN: ANCRAI; ISSN: 0003-4592
DOCUMENT TYPE: Journal
LANGUAGE: Italian
GI For diagram(s), see printed CA Issue.
AB The structure I was confirmed for the compd. C16H20O7 (CA substance) isolated from the methanolic extns. of Hyaenanche globosa fruits. Thus, catalytic (Pd) redn. of 0.1 g. I in H2O gave 0.07 g. II, m. 238-90.degree., [.alpha.]20D -17.5.degree., which with POCl3 in C5H5N 120 hrs. at room temp. gave III, m. 185-90.degree., [.alpha.]20D 52.5.degree.. IV (compd. D) (CA 63: 11467c) with POCl3 in C5H5N, 120 hrs. at room temp.

gave a mixt. of III and [illegible] which were sepd. by chromatog. [illegible]. Conversely, IV with SOCl2 in C5H5N, [illegible] hrs. at room temp., [illegible] sulfite, m. 240-2.degree., [.alpha.]20D -141.degree.. Finally, [illegible] (CA 63: 14917a) was correlated with picrotoxinin. Thus, [illegible] ml. concd. HCl 4 min. at 35.degree. gave 0.7 g. VI [illegible], which with 0.1N NaOH, 1 hr. at room temp., then AcOH added, and the mixt. kept 18 hrs., gave VII, m. [illegible].degree., [.alpha.][illegible] -[illegible].degree.. [illegible] with CHCl3-dry [illegible] KOH [illegible], and the mixt. [illegible], m. [illegible].degree., [.alpha.][illegible].degree., [illegible] reagent in MeOH [illegible] hrs. at room temp., [illegible] with CH2N2, gave III, m. 147-[illegible].degree., [.alpha.][illegible] -[illegible].degree.. X, from picrotoxinin (CA [illegible]), treated with [illegible] in AcOH at room temp. and under N gave XI, m. [illegible].degree., [.alpha.][illegible] -[illegible].degree., which with the Jones reagent in MeOH, 1 hr. at room temp., was transformed into XII, m. 190-2.degree., [.alpha.]20D -126.degree.. To a refluxed soln. of [illegible] g. XII in 1.35 ml. CCl4, a mixt. of 0.56 ml. AcOH, [illegible] ml. Ac2O, and [illegible] ml. of a soln. of tert-butyl chromate in CCl4 added dropwise, the reaction mixt. kept 32 hrs. at 110.degree., the excess [illegible] with iso-PrOH, the soln. dild. and extd. with AcOEt, [illegible], identical with the compd. obtained from V.

IT **19600-00-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

L6 ANSWER 25 OF 26 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1965:74348 HCAPLUS
DOCUMENT NUMBER: 62:74348
ORIGINAL REFERENCE NO.: 62:13177d-e
TITLE: Synthesis and chemistry of phospholes
AUTHOR(S): Campbell, I. G. M.; [illegible]; Hopkins, M. B.; [illegible], A. N.
CORPORATE SOURCE: Univ. Southampton, UK
SOURCE: J. Chem. Soc. (1965), [illegible]
DOCUMENT TYPE: Journal
LANGUAGE: English
GI For diagram(s), see printed CA Issue.
AB The prepn. and properties of some phospholes (phosphacyclopentadienes) are described. The product of the reaction of 1,2,5-triphenylphosphole with CH2N2 is shown to be a cyclopropane deriv. (I), but the reaction of the phosphole with Me diazoacetate yields a compd. for which the ring-expanded structure (II) cannot be rigorously excluded. N.M.R. spectra were important in detg. these structures, and some interesting long-range couplings with P have been encountered.
IT **1256-02-6**, 3-Phosphabicyclo[3.2.0]hept-1(5)-ene-6,7-di-carboxylic anhydride, 2,3,4-triphenyl-, 3-oxide
(prepn. of)

L6 ANSWER 26 OF 26 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1965:74347 HCAPLUS
DOCUMENT NUMBER: 62:74347
ORIGINAL REFERENCE NO.: [illegible]
TITLE: Phospholipids. III. Synthesis of a phosphonic acid analog of L-.alpha.-(distearoyl)lecithin
AUTHOR(S): Baer, Erich; Stanacev, Nikola Z.
CORPORATE SOURCE: Univ. Toronto, Can.
SOURCE: J. Am. Chem. Soc. (1965), 87(3), 679-80
CODEN: JACSAT; ISSN: 0002-7863
DOCUMENT TYPE: Journal
LANGUAGE: English
AB cf. CA 62, 2799b. The phosphonic acid analog of L-.alpha.-

```
      (distearoyl)lecithin was obtained via the following series of
      intermediates: di-[illegible] [illegible] .[illegible]
      bromoethylphosph[illegible] salt, [illegible]
      [illegible]mpn.) sintering [illegible]
      m. [illegible]-5.degree. [illegible]
      distearoyl-L-.alpha.-glyceryl(2-bromoethyl)phosph[illegible] with NMe3 in
      HCONMe2 gave distearoyl L-.alpha.-glyceryl(2-trimethylammoniummethyl)phosp
      honate m. 198-202.degree., sintering at 195.degree. [.alpha.]25D
      [illegible].degree. (c [illegible], 2:1 vol./vol. EtOH-free CHCl3-MeOH).
IT    1256-02-6, ?-Phosphabicyclo[?.2.0]hept-1(5)-ene-[illegible]-di-carboxylic
      anhydride, [illegible],3,4-triphenyl-, [illegible]-oxide
         (prepn. of)


=>
=>


=> fil caold
FILE 'CAOLD' ENTERED AT 15:52:20 ON 06 FEB 2003
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FILE COVERS 1907-1966
FILE LAST UPDATED: 01 May 1997 (19970501/UP)

  This file contains CAS Registry Numbers for easy and accurate
  substance identification.  Title keywords, authors, patent
  assignees, and patent information, e.g., patent numbers, are
  now searchable from 1907-1966.  TIFF images of CA abstracts
  printed between 1907-1966 are available in the PAGE
  display formats.

  This file supports REGISTRY for direct browsing and searching of
  all substance data from the REGISTRY file.  Enter HELP FIRST for
  more information.


=>
=>
=> s l5
L7            1 L5

=>
=>

=> d all l7

L7    ANSWER 1 OF 1  CAOLD  COPYRIGHT 2003 ACS
AN    CA62:13177c  CAOLD
TI    phosphonolipids - (III) synthesis of a phosphonic acid, analog of
      L-.alpha.(distaroyl)lecithin
AU    Baer, Erich; Stanacev, N. Z.
IT     999-52-6    1010-05-5   1031-12-5   1031-13-6   1031-14-7   1034-56-6
      1045-11-0   1048-[illegible]-6   1155-95-9   1162-64-7   1162-70-5   1169-56-8
      1169-57-9   1169-58-0   1181-62-0   1223-77-4   1249-30-5   1249-32-7
      1256-02-6   1475-80-5   1475-81-6   1609-67-2   1609-68-3
      1609-70-7   1641-62-9   1641-63-0   1641-64-1   1794-96-3   1990-89-2
      2141-46-2   2302-[illegible]-7   2857-89-8   2857-90-1   2857-91-2   2857-92-3
      3272-83-1   6886-94-8   7362-34-7  73294-90-3  95164-72-0  95263-18-6
      105862-63-3


=>
```

=>

=> fil reg
FILE 'REGISTRY' ENTERED AT 15:52:34 ON 06 FEB [illegible]
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: [illegible]
DICTIONARY FILE UPDATES: [illegible]

TSCA INFORMATION NOW CURRENT THROUGH MAY [illegible]

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

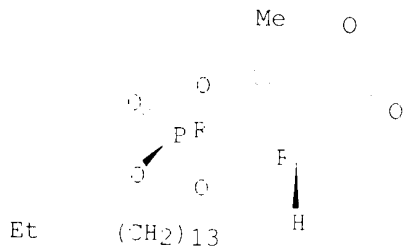
Experimental and calculated property data are [illegible]
PROPERTIES for more information. See STNote [illegible]
in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes2[illegible].pdf

=>
=>

=> d ide can 15 tot

L5 ANSWER 1 OF 32 REGISTRY COPYRIGHT 2003 ACS
RN 447408-07-3 REGISTRY
CN 1H,6H-Furo[3,4-e][1,3,2]dioxaphosphepin-6-one, 8,8a-dihydro-5-methyl-3-[(14-methylhexadecyl)oxy]-, 3-oxide, (3R,8aR)-rel- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Cyclipostin Q3
FS STEREOSEARCH
MF C24 H43 O6 P
SR CA
LC STN Files: CA, CAPLUS

Relative stereochemistry.
Currently available stereo shown.



1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 137:165939

L5 ANSWER 2 OF 32 REGISTRY COPYRIGHT 2003 ACS
RN 372092-51-6 REGISTRY
CN 1H,6H-Furo[3,4-e][1,3,2]dioxaphosphepin-6-one, 8,8a-dihydro-5-methyl-3-[(13-oxohexadecyl)oxy]-, 3-oxide, (3R,8aR)-rel- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Cyclipostin H
FS STEREOSEARCH
MF C23 H39 O7 P
SR CA
LC STN Files: CA, CAPLUS

Relative stereochemistry.
Currently available stereo shown.

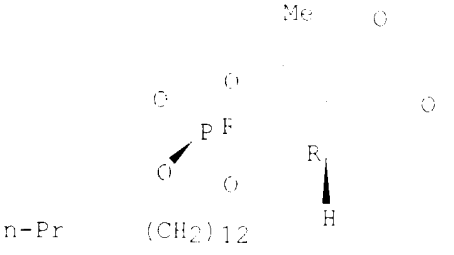
2 REFERENCES IN FILE CA (1962 TO DATE)
2 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 137:165939

REFERENCE 2: 135:356841

L5 ANSWER 3 OF 32 REGISTRY COPYRIGHT 2003 ACS
RN 372092-46-1 REGISTRY
CN 1H,6H-Furo[3,4-e][1,3,2]dioxaphosphepin-6-one, 8,8a-dihydro-5-methyl-3-[(13-oxohexadecyl)oxy]-, 3-oxide, (3R,8aR)-rel- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Cyclipostin G
FS STEREOSEARCH
MF C23 H39 O7 P
SR CA
LC STN Files: CA, CAPLUS

Relative stereochemistry.
Currently available stereo shown.



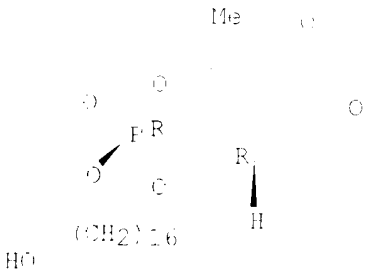
2 REFERENCES IN FILE CA (1962 -)
2 REFERENCES IN FILE CAPLUS (1962 -)

REFERENCE 1: 137:165939

REFERENCE 2: 135:356841

L5 ANSWER 4 OF 5 REGISTRY COPYRIGHT ... ACS
RN 372092-44-[illegible]
CN 1H,6H-Furo[3,4-e][1,3,2]dioxaphosphepin-6-one, 5,8a-dihydro-5-[(16-hydroxyhexadecyl)oxy]-5-methyl-, 3-oxide, (3R,8aR)-rel- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Cyclipostin E
FS STEREOSEARCH
MF C23 H41 O7 P
SR CA
LC STN Files: CA, CAPLUS

Relative stereochemistry.
Currently available stereo shown.



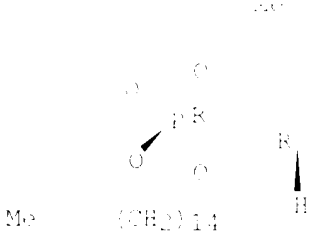
2 REFERENCES IN FILE CA (1962 -)
2 REFERENCES IN FILE CAPLUS (1962 -)

REFERENCE 1: 137:165939

REFERENCE 2: 135:356841

L5 ANSWER 5 OF 32 REGISTRY COPYRIGHT 2003 ACS
RN 372092-43-8 REGISTRY
CN 1H,6H-Furo[3,4-e][1,3,2]dioxaphosphepin-6-one, 5,8a-dihydro-5-[(16-hydroxyhexadecyl)oxy]-5-methyl-, 3-oxide, (3R,8aR)-rel- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Cyclipostin D
FS STEREOSEARCH
MF C23 H41 O7 P
SR CA
LC STN Files: CA, CAPLUS

Relative stereochemistry.
Currently available stereo shown.



OH

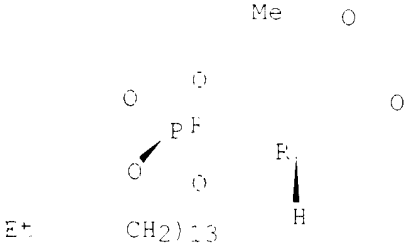
3 REFERENCES IN FILE CA (1962 TO DATE)
2 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 137:165939

REFERENCE 2: 135:356841

L5 ANSWER 6 OF 32 REGISTRY COPYRIGHT 2003 ACS
RN 372092-41-6 REGISTRY
CN 1H,6H-Furo[3,4-e][1,3,2]dioxaphosphacyclohexadecin-6-one, 3,4a-dihydro-3-[(13-hydroxyhexadecyl)oxy]-5-methyl-, 3-oxide, (3R,4aR)-rel- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Cyclipostin C
FS STEREOSEARCH
MF C23 H41 O7 P
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Relative stereochemistry.
Currently available stereo shown.



OH

3 REFERENCES IN FILE CA (1962 TO DATE)
3 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 137:165939

REFERENCE 2: 136:390111

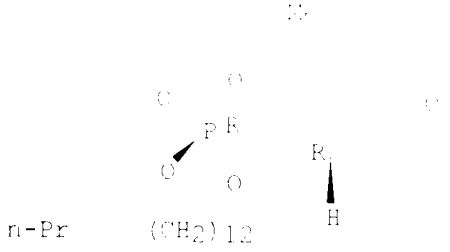
REFERENCE 3: 135:356841

L5 ANSWER 7 OF 32 REGISTRY COPYRIGHT 2003 ACS
RN 372092-36-9 REGISTRY
CN 1H,6H-Furo[3,4-e][1,3,2]dioxaphosphacyclohexadecin-6-one, 3,4a-dihydro-3-[(13-

hydroxyhexadecyl)oxy]-5-methyl-, [illegible], 8,8a-dihydro-5-[(14-methylpentadecyl)oxy]-5-propyl-, 3-oxide, (3R,8aR)-rel- (9CI) (CA INDEX NAME)

OTHER NAMES:
CN Cyclipostin B
FS STEREOSEARCH
MF C25 H41 O7 P
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Relative stereochemistry.
Currently available stereo shown.



n-Pr $(CH_2)_{12}$

CH

3 REFERENCES IN FILE CA (1962 TO DATE)
3 REFERENCES IN FILE CAPLUS (1962 TO DATE)

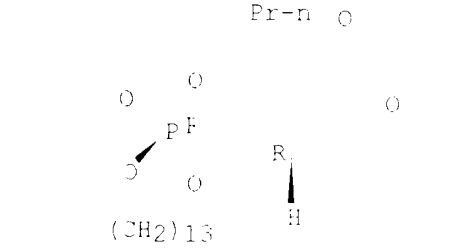
REFERENCE 1: 137:165939

REFERENCE 2: 136:380111

REFERENCE 3: 135:[illegible]

L5 ANSWER 3 OF 32 REGISTRY COPYRIGHT 2003 ACS
RN 372092-05-2 REGISTRY
CN 1H,6H-Furo[3,4-e][1,3,2]dioxaphosphepin-6-one, 8,8a-dihydro-5-[(14-methylpentadecyl)oxy]-5-propyl-, 3-oxide, (3R,8aR)-rel- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Cyclipostin T2
FS STEREOSEARCH
MF C25 H45 O6 P
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Relative stereochemistry.
Currently available stereo shown.



Me_2CH

3 REFERENCES IN FILE CA (1962 TO DATE)

3 REFERENCES IN FILE CA (1962 TO DATE)

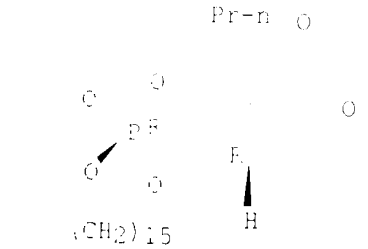
REFERENCE 1: 137:165939

REFERENCE 2: 136:380111

REFERENCE 3: 135:356841

L5 ANSWER 9 OF 32 REGISTRY COPYRIGHT 2003 ACS
RN 372092-04-1 REGISTRY
CN 1H,6H-Furo[3,4-e][1,3,2]dioxaphosphepin-6-one, 5-ethyl-3-(hexadecyloxy)-8,8a-dihydro-5-propyl-, 3-oxide, (3R,5R,8aR)-rel- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Cyclipostin T
FS STEREOSEARCH
MF C25 H47 O6 P
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Relative stereochemistry.
Currently available stereo shown.



3 REFERENCES IN FILE CA (1962 TO DATE)
3 REFERENCES IN FILE CAPLUS (1962 TO DATE)

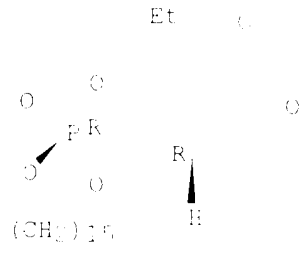
REFERENCE 1: 137:165939

REFERENCE 2: 136:380111

REFERENCE 3: 135:356841

L5 ANSWER 10 OF 32 REGISTRY COPYRIGHT 2003 ACS
RN 372092-03-0 REGISTRY
CN 1H,6H-Furo[3,4-e][1,3,2]dioxaphosphepin-6-one, 5-ethyl-3-(hexadecyloxy)-8,8a-dihydro-, 3-oxide, (3R,8aR)-rel- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Cyclipostin S
FS STEREOSEARCH
MF C21 H43 O6 P
SR CA
LC STN Files: BIOSIS, CA, CAPLUS, USPATFULL

Relative stereochemistry.
Currently available stereo shown.



Et

(CH2)15

Me

[illegible]

REFERENCE 1: 137:[illegible]

REFERENCE 2: 136:[illegible]

REFERENCE 3: 135:356841

L5 ANSWER 11 OF 32 REGISTRY [illegible]

RN 372091-98-0 REGISTRY

CN 1H,6H-Furo[3,4-e][1,3,2]dioxaphosphepin-6-one, 8,8a-dihydro-5-methyl-3-[(13-methyltetradecyl)oxy]-, 3-oxide, (3R,8aR)-rel- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN Cyclipostin FZ

FS STEREOSEARCH

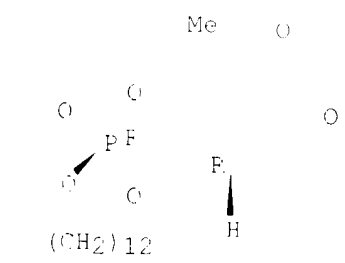
MF C22 H39 O6 P

CR CA

LC STN Files: CA, CAPLUS, USPATFULL

Relative stereochemistry.

Currently available stereo shown.



Me

Me2CH

3 REFERENCES IN FILE CA (1962 TO DATE)

3 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 137:165939

REFERENCE 2: 136:[illegible]

REFERENCE 3: 135:356841

L5 ANSWER 12 OF 32 REGISTRY COPYRIGHT 2003 ACS

RN 372091-96-8 REGISTRY

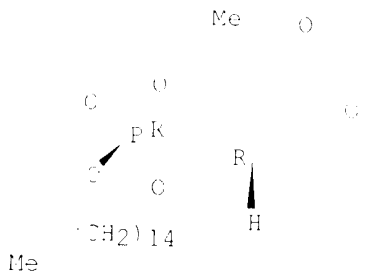
CN 1H,6H-Furo[3,4-e][1,3,2]dioxaphosphepin-6-one, 8,8a-dihydro-5-methyl-3-(pentadecyloxy)-, 3-oxide, (3R,8aR)-rel- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN Cyclipostin R

FS STEREOSEARCH
MF C22 H39 O6 P
SR CA
LC STN Files: CA, [illegible]

Relative stereochemistry.
Currently available stereo shown.



3 REFERENCES IN FILE CA (1962 TO DATE)
3 REFERENCES IN FILE [illegible] (1962 TO DATE)

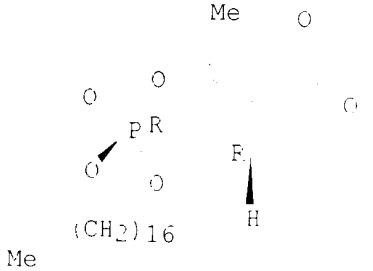
REFERENCE 1: 137:165939

REFERENCE 2: 136:380111

REFERENCE 3: 135:356841

L5 ANSWER 13 OF 32 REGISTRY COPYRIGHT 2003 ACS
RN 372091-95-7 REGISTRY
CN 1H,6H-Furo[3,4-e][1,3,2]dioxaphosphepin-6-one, 3-(heptadecyloxy)-8,8a-dihydro-5-methyl-, 3-oxide, (3R,8aR)-rel- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Cyclipostin Q
FS STEREOSEARCH
MF C24 H43 O6 P
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Relative stereochemistry.
Currently available stereo shown.



3 REFERENCES IN FILE CA (1962 TO DATE)
3 REFERENCES IN FILE CAPLUS (1962 TO DATE)

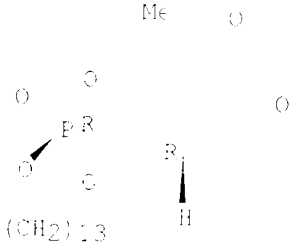
REFERENCE 1: 137:165939

REFERENCE 2: 136:380111

REFERENCE 3: 135:356841

L5 ANSWER 14 OF 32 REGISTRY COPYRIGHT 2003 ACS
RN 372091-94-6 REGISTRY
CN 1H,6H-Furo[3,4-e][1,3,2]dioxaphosphepin-6-one, 8,8a-dihydro-5-methyl-3-[(14-methylpentadecyl)oxy]-, 3-oxide, (3R,8aR)-rel- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Cyclipostin P2
FS STEREOSEARCH
MF C23 H41 O6 P
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Relative stereochemistry.
Currently available stereo shown.



Me2CH

3 REFERENCES IN FILE CA (1962 TO DATE)
3 REFERENCES IN FILE CAPLUS (1962 TO DATE)

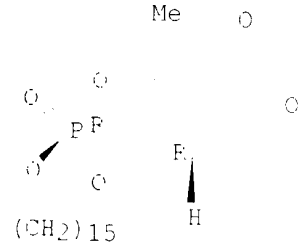
REFERENCE 1: 137:165939

REFERENCE 2: 136:380111

REFERENCE 3: 133:356841

L5 ANSWER 15 OF 32 REGISTRY COPYRIGHT 2003 ACS
RN 372091-46-8 REGISTRY
CN 1H,6H-Furo[3,4-e][1,3,2]dioxaphosphepin-6-one, 3-(hexadecyloxy)-8,8a-dihydro-5-methyl-, 3-oxide, (3R,8aR)-rel- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Cyclipostin P
FS STEREOSEARCH
MF C23 H41 O6 P
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Relative stereochemistry.
Currently available stereo shown.



Me

3 REFERENCES IN FILE CA (1962 TO DATE)

3 REFERENCES IN FILE CAPLUS (1962 TO DATE)

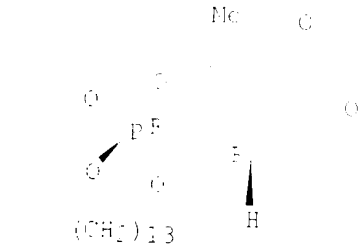
REFERENCE 1: 137:[illegible]

REFERENCE 2: 136:[illegible]

REFERENCE 3: 135:356841

L5 ANSWER 16 OF 32 REGISTRY [illegible]
RN 372090-93-2 REGISTRY
CN 1H,6H-Furo[3,4-e][1,3,2]dioxaphosphepin-6-one, 8,8a-dihydro-5-methyl-3-(tetradecyloxy)-, 3-oxide, (3R,8aR)-rel- (9CI)
OTHER NAMES:
CN Cyclipostin N
FS STEREOSEARCH
MF C21 H37 O6 P
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Relative stereochemistry.
Currently available stereo shown.



3 REFERENCES IN FILE CA (1962 TO DATE)
3 REFERENCES IN FILE CAPLUS (1962 TO DATE)

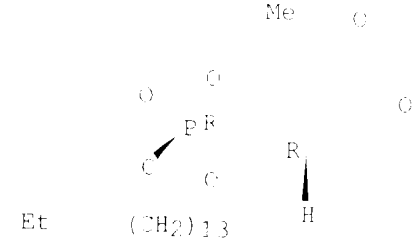
REFERENCE 1: 137:165939

REFERENCE 2: 136:380111

REFERENCE 3: 135:356841

L5 ANSWER 17 OF 32 REGISTRY COPYRIGHT 2003 ACS
RN 372090-27-2 REGISTRY
CN 1H,6H-Furo[3,4-e][1,3,2]dioxaphosphepin-6-one, 8,8a-dihydro-5-methyl-3-[(14-oxohexadecyl)oxy]-, 3-oxide, (3R,8aR)-rel- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Cyclipostin F
FS STEREOSEARCH
MF C23 H39 O7 P
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Relative stereochemistry.
Currently available stereo shown.



3 REFERENCES IN FILE CA (1962 TO DATE)
3 REFERENCES IN FILE CAPLUS (1962 TO DATE)

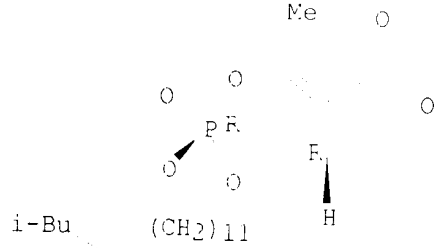
REFERENCE 1: 137:165939

REFERENCE 2: 136:380111

REFERENCE 3: 135:356841

L5 ANSWER 18 OF 32 REGISTRY COPYRIGHT 2003 ACS
RN 372038-34-1 REGISTRY
CN 1H,6H-Furo[3,4-e][1,3,2]dioxaphosphepin-6-one, 8,8a-dihydro-3-[(17-hydroxy-14-methylpentadecyl)oxy]-5-methyl-, 3-oxide, (3R,8aR)-rel- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Cyclipostin A2
FS STEREOSEARCH
MF C23 H41 O7 P
SF CA
LC STN Files: CA, CAPLUS, USPATFULL

Relative stereochemistry.
Currently available stereo shown.



3 REFERENCES IN FILE CA (1962 TO DATE)
3 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 137:165939

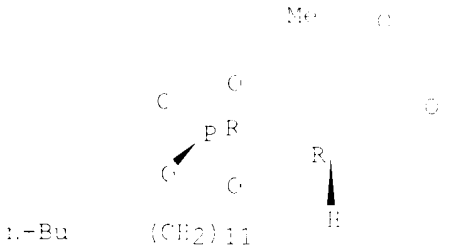
REFERENCE 2: 136:380111

REFERENCE 3: 135:356841

L5 ANSWER 19 OF 32 REGISTRY COPYRIGHT 2003 ACS

RN 372083-50-6 REGISTRY
CN 1H,6H-Furo[3,4-c][1,3,2]dioxaphosphepin-6-one, 3,4,5-trihydro-3-[(12-hydroxyhexadecyl)oxy]-5-methyl-, 2-oxide, (3R,5R)-rel- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Cyclipostin A
FS STEREOSEARCH
MF C23 H41 O7 P
SR CA
LC STN Files: CA, CAPLUS, TOXLINE

Relative stereochemistry.



CH

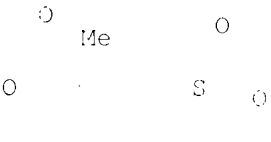
3 REFERENCES IN FILE CA (1962 TO DATE)
3 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 137:165939

REFERENCE 2: 136:380111

REFERENCE 3: 135:356841

L5 ANSWER 20 OF 32 REGISTRY COPYRIGHT 2003 ACS
RN 224570-83-4 REGISTRY
CN Thieno[3',4':3,4]cyclobuta[1,2-c]furan-1,3-dione, hexahydro-3a-methyl-, 5,5-dioxide (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C9 H10 O5 S
SR CA
LC STN Files: CA, CAPLUS, CASREACT



C

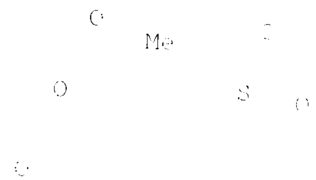
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 130:337674

L5 ANSWER 21 OF 32 REGISTRY COPYRIGHT 2003 ACS

RN 224576-81-2 REGISTRY
CN Thieno[3',4':3,4]cyclobuta[1,2-c]furan-1,3-dione, hexahydro-8-methyl-,
5,5-dioxide (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C9 H10 O5 S
SR CA
LC STN Files: CA, CAPLUS, CASREACT



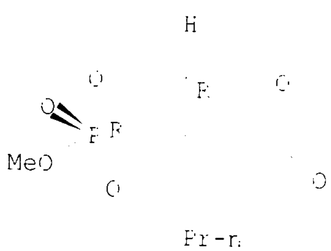
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 130:337674

L5 ANSWER 22 OF 32 REGISTRY COPYRIGHT 2003 ACS
RN 156312-24-8 REGISTRY
CN 1H,6H-Furo[3,4-e][1,3,2]dioxaphosphepin-6-one, 8,8a-dihydro-3-methoxy-5-
propyl-, 3-oxide, (3R,8aR)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1H,6H-Furo[3,4-e][1,3,2]dioxaphosphepin-6-one, 8,8a-dihydro-3-methoxy-5-
propyl-, 3-oxide, (3R-cis)-
OTHER NAMES:
CN NK 901093A
FS STEREOSEARCH
MF C10 H15 O6 P
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.



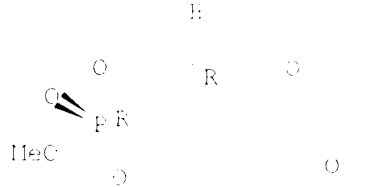
1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 121:81134

L5 ANSWER 23 OF 32 REGISTRY COPYRIGHT 2003 ACS
RN 144773-26-3 REGISTRY
CN 1H,6H-Furo[3,4-e][1,3,2]dioxaphosphepin-6-one, 8,8a-dihydro-3-methoxy-5-
methyl-, 3-oxide, (3R,8aR)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1H,6H-Furo[3,4-e][1,3,2]dioxaphosphepin-6-one, 8,8a-dihydro-3-methoxy-5-

methyl-, 3-oxide, (3R-cis)-
OTHER NAMES:
CN Cyclophosti
CN Cyclophosti
CN NK 901093
FS STEREOSEARCH
MF C[illegible] H11 O6 P
SR CA
LC STN Files: [illegible], CA, [illegible], MEDLINE

Absolute stereochemistry.



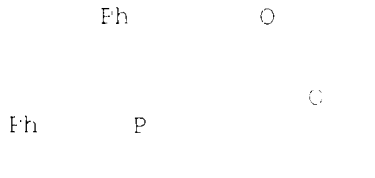
[illegible] REFERENCES IN FILE CA [illegible] TO DATE
[illegible] REFERENCES IN FILE [illegible] TO DATE

REFERENCE 1: 115:279722

REFERENCE 2: 100:32992

REFERENCE 3: 118:2472

L5 ANSWER 24 OF 32 REGISTRY COPYRIGHT 2003 ACS
RN 137411-69-9 REGISTRY
CN 4,7-Phosphinidenebenzo[3,4]cyclobuta[1,2-c]furan-1,[illegible]-dione, 3a,3b,4,7,7a,7b-hexahydro-4,7,8-triphenyl-, [illegible]-oxide, [illegible] (CA INDEX NAME)
MF C28 H21 O4 P
SR CA
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT
(*File contains numerically searchable property data)

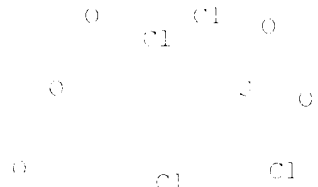


[illegible] REFERENCES IN FILE CA [illegible] TO DATE
[illegible] REFERENCES IN FILE [illegible] TO DATE

REFERENCE 1: 115:279722

L5 ANSWER 25 OF 32 REGISTRY COPYRIGHT 2003 ACS
RN 84451-46-7 REGISTRY
CN Thieno[3',4':3,4]cyclobuta[1,2-c]furan-1,3-dione, 3b,4,6,6a-tetrachlorohexahydro-, 5,5-dioxide (9CI) (CA INDEX NAME)

FS 3D CONCORD
MF C8 H4 C14 O5 S
LC STN Files: CA, CAPLUS



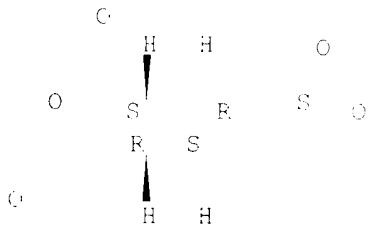
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 98:71904

L5 ANSWER 26 OF 32 REGISTRY COPYRIGHT 2003 ACS
RN 82585-14-6 REGISTRY
CN Thieno[3',4':3,4]cyclobuta[1,2-c]furan-1,3-dione, [illegible], (3a.alpha.,3b.beta.,6a.beta.,6b.alpha.)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C8 H8 O5 S
LC STN Files: CA, CAPLUS, CASREACT

Relative stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

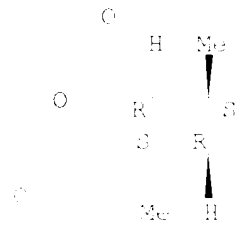
2 REFERENCES IN FILE CA (1962 TO DATE)
2 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 104:69022

REFERENCE 2: 97:71910

L5 ANSWER 27 OF 32 REGISTRY COPYRIGHT 2003 ACS
RN 79926-12-8 REGISTRY
CN Thieno[3',4':3,4]cyclobuta[1,2-c]furan-1,3-dione, hexahydro-3a,6a-dimethyl-, 5,5-dioxide, (3a.alpha.,3b.beta.,6a.beta.,6b.alpha.)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
DR 99685-39-9
MF C10 H12 O5 S
LC STN Files: CA, CAPLUS, CASREACT

Relative stereochemistry.

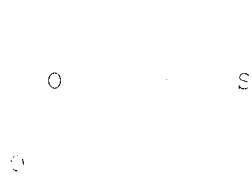


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 96:19267

L5 ANSWER 28 OF 32 REGISTRY COPYRIGHT 2003 ACS
RN 77196-23-7 REGISTRY
CN Thieno[3',4':3,4]cyclobuta[1,2-c]furan-1(3H)-one, hexahydro-, 5,5-dioxide (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C8 H10 O4 S
LC STN Files: CA, CAPLUS, CASREACT



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 94:156660

L5 ANSWER 29 OF 32 REGISTRY COPYRIGHT 2003 ACS
RN 35974-24-2 REGISTRY
CN Thieno[3',4':3,4]cyclobuta[1,2-c]furan-1,3-dione, hexahydro-, 5,5-dioxide (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 3-Thiabicyclo[3.2.0]heptane-6,7-dicarboxylic anhydride, 3,3-dioxide (8CI)
FS 3D CONCORD
MF C8 H8 O5 S
LC STN Files: CA, CAPLUS, CASREACT, CHEMCATS, IFICDB, IFIPAT, IFIUDB, USPATFULL

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

12 REFERENCES IN FILE CA (1962 TO DATE)
12 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 130:3[illegible]

REFERENCE 2: 105:24138

REFERENCE 3: [illegible]

REFERENCE 4: 98:71[illegible]

REFERENCE 5: 9[illegible]

REFERENCE 6: 94:15[illegible]

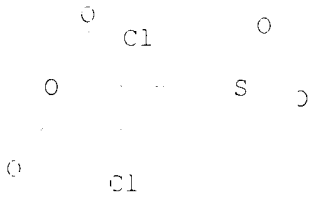
REFERENCE 7: 8[illegible]

REFERENCE 8: [illegible]

REFERENCE 9: 83:92377

REFERENCE 10: 78:71698

L5 ANSWER 30 OF 32 REGISTRY COPYRIGHT 2003 ACS
RN 35974-22-0 REGISTRY
CN Thieno[3',4':3,4]cyclobuta[1,2-c]furan-4,6-dione, 3b,6a-dichlorohexahydro-, 2,2-dioxide (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 3-Thiabicyclo[3.2.0]heptane-6,7-dicarboxylic anhydride, 6,7-dichloro-, 3,3-dioxide (8CI)
FS 3D CONCORD
MF C8 H6 Cl2 O5 S
LC STN Files: CA, CAPLUS



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4 REFERENCES IN FILE CA (1962 TO DATE)
4 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 98:42793

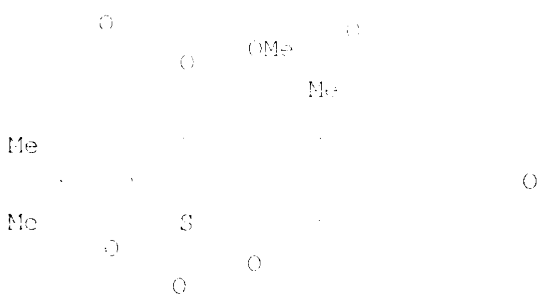
REFERENCE 2: 86:[illegible]

REFERENCE 3: 76:153465

REFERENCE 4: 75:140590

L5 ANSWER 31 OF 32 REGISTRY COPYRIGHT 2003 ACS

RN   19600-00-1 REGISTRY
CN   Spiro[2,5-methano-7H-oxireno[3,4]cyclopent[1,2-d]oxepin-7,2'-oxiran]-[illegible](2H)-
     one, 1a.beta.,1b,5.alpha.,6,6a,7a.beta.-hexahydro-1b.alpha.-hydroxy-[illegible]-(1-
     hydroxy-1-methylethyl)-6.beta.-methoxy-6a.alpha.-methyl-, [illegible]
     (-)- (8CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN   Spiro[7,1b,6-[illegible]
     d][1,3,2]dioxathi[illegible]
     1a.beta.,6.beta.,[illegible]
     5,5,8a.alpha.-trimethyl-, [illegible]-oxide, (-)-
MF   C16 H20 O8 S
LC   STN Files: CA, CAPLUS, TOXCENTER

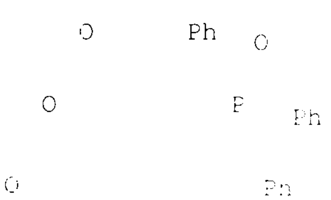


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE   1: 68:3008

L5   ANSWER 32 OF 32 REGISTRY COPYRIGHT 2003 ACS
RN   1256-02-6 REGISTRY
CN   3-Phosphabicyclo[3.2.0]hept-1(5)-ene-6,7-dicarboxylic anhydride,
     2,3,4-triphenyl-, 3-oxide (7CI, 8CI) (CA INDEX NAME)
FS   3D CONCORD
MF   C26 H19 O4 P
LC   STN Files: CA, CAOLD, CAPLUS



2 REFERENCES IN FILE CA (1962 TO DATE)
2 REFERENCES IN FILE CAPLUS (1962 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE   1: 62:74348

REFERENCE   2: 62:74347